The TOOL SHED

NUMBER 98 SEPTEMBER 1997

A Journal of Tool Collecting published by CRAFTS of New Jersey

THE STANLEY RULE & LEVEL COMPANY

(continued from June) by John Walter

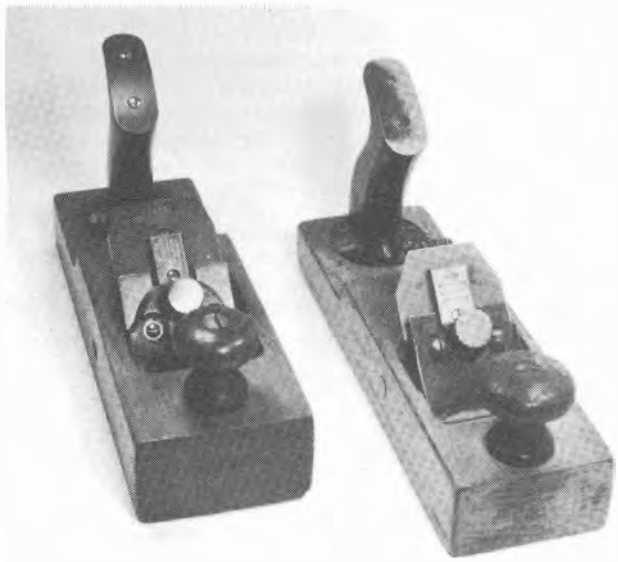
Leading Stanley into the New Century

President Charles Mead died in 1899 and was succeeded by Frederick Stanley, son of the company's first president Henry Stanley, after a reportedly memorable battle within the Stanley family and among shareholders. Frederick's 27 year old son, Alix, a graduate of Yale's Sheffield School of Engineering, joined the firm at this time with succession to the top apparently a clear route for him. But, Frederick died within seven months, and this time the family went outside for its new president, Charles Mitchell. Mitchell was a New York patent attorney with many New Britain clients, a former Commissioner of Patents, and a director of the Stanley Works. Mitchell died in 1911, and Alix Stanley succeeded to the presidency and served until the merger with the Stanley Works in 1920.

Acquisitions, so important to Stanley's formative years, were to spearhead its growth during the next two decades. The new era of expansion began in 1898 with a purchase involving only patent rights. Oscar Schubert of Berlin, Germany, had designed a new type of ruler which, in certain respects, was superior to traditional folding rules and was much less expensive to make. This was the spring joint rule, brought to Stanley's attention by Justus Traut. Stanley immediately acquired American rights to manufacture. Someone thought to call it a "Zig Zag," and when Stanley registered their new trademark for the proposed line of rulers in 1899 it was under this name. The Zig Zag rule was the object of at least 23 patent improvements from 1901 through 1935 giving some indication of the importance given to the new line. From 1900 through 1984 there have been 146 models of the Zig Zag rule produced.

Stanley had manufactured a few screwdrivers. There were the turnscrew-type Nos. 64 and 86 introduced in 1870 and 1897 respectively, based on J.P. Curtis's 1871 patent for securing the shank, and the Victor line introduced in 1905. But, it was the acquisition of Hurley and Wood of Plantsville, Connecticut, that opened the doors wide into the screwdriver market. Hurley and Wood had produced a quality driver coined the "Hurwood" based on George Wood's patent. Stanley applied this name to a redesign of their Victor line in 1907. Stanley also brought George Wood into the company to set up the new line. This proved to be the greater part of the bargain as he later developed and patented the Everlasting chisels, an admired Stanley product for many years.

(continued on page 4)



Left: Stanley No. G36 Gage smooth plane, 1919-1923.
Right: Gage Tool Company, Vineland, N.J.
No.4 ½ smooth plane, 1886-1919.

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September 14, Annual CRAFTS Picnic
(*see page 2*)

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Membership in CRAFTS is open to anyone who shares the above interests. Annual dues per person or couple are twelve dollars for the membership year of July 1 through June 30. Membership dues may be sent to the Treasurer: John Whelan, 38 Colony Court, Murray Hill, NJ 07974 (write check payable to Crafts of New Jersey).

CRAFTS of NJ meets at the HOST Masonic Lodge, High Bridge. Take I-78 to Route 31 exit at Clinton. Go north on Rte. 31 two miles to second traffic light at the High Bridge exit. Turn right and go about half a mile to Dennis Ave. Turn left, then straight to the Masonic Lodge (on the left). Tailgate sales in the parking lot begin at 1 P.M.; meeting starts at 2 P.M.

The TOOL SHED
Published five times a year for members of CRAFTS of New Jersey. Managing Editor: Hank Allen, 524 Harristown Rd, Glen Rock, NJ 07452. Production editor: Stuart Shippey, 251 Hillside Ave., Chatham, NJ 07928-1732. Articles, especially about early tools and trades, are encouraged and may be sent to the Managing Editor. Please send legible hand-written or typed text, or a PC disk with *Word Perfect®*, *MS-Word®* or ascii file, or by FAX to 973 301-9781 or 973 635-7939 (talk first)

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CRAFTS Calendar of Events

July 1, 1997 - CRAFTS member dues renewal

Aug. 31, 1997 - *ToolShed* Nov. issue free-ad deadline

Sept. 14, 1997 - CRAFTS picnic

Nov. 9, 1997 - CRAFTS meeting, High Bridge, N.J.

Feb. 8, 1998 - CRAFTS meeting, High Bridge, N.J.

Apr. 4, 1998 - CRAFTS auction, Flemington, N.J.

CRAFTS' Picnic

This space usually introduces our meeting speaker, but this is our picnic issue. You'll be receiving separate notice of the picnic to be held on Sept. 14. If you have never been, you're missing a great day that includes tailgating with over 50 member-dealers, a great lunch, members' displays, a small auction, and contests for most beautiful, most unusual, ugliest, and "make do" tools. Please consider presenting a display, for they are a very enjoyable part of our day and more is better. Displays are indoors, so there's no worry with the weather. Contact Ken Vliet 908-439-2085 if you can help with a display. AND, there are prizes.

Officers & Directors

At our June meeting officers and directors were elected for next year. Officers are Joe Hauck, President; Greg Welsh, Vice President; Don Wallace, Secretary; Jack Whelan, Treasurer; Stuart Shippey, Editor. New directors Hank Allen, Ed Modugno, and Helen Whelan join old directors Chuck Granick, Don Kahn, Herb Kean, Dominic Micalizzi, Ken Vliet, and Steve Zluky. Retiring directors are Alex and Barbara Farnham.

Displaying Tools

The September issue two years ago introduced the first "Displaying Tools" article. It's become a regular feature thanks to your willingness to share your displays. New material is always welcome. Give me a call at 201-444-9440. Chuck Granick has been arranging increasingly interesting displays for our meetings, which we'll continue to include in future issues.

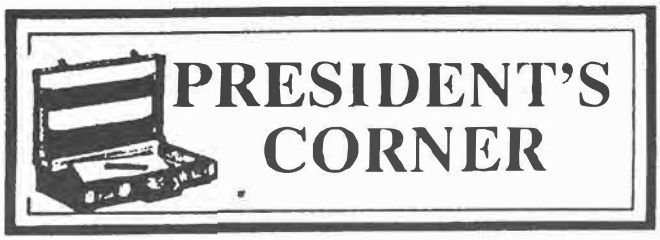
Meet Your Dealers

In past issues we've brought you Clarence Blanchard, Bud Brown, Richard Crane, Martin Donnelly, Bill Gustafson, Bill Hermanek, Michael Humphrey, Barry Hurchalla, Frank Kerr, Frank Kosmerl, Tony Murland, Bill Phillips, Roger Smith, David Stanley, Bud & Vera Steere, John Walter, Paul Weidenschilling, and Tom Witte. And, there are many more to come. But, if there are dealers who you think we should cover, or if you are a dealer and would like to be covered, either call me or send me a 450 word story. In fact, if anyone has any comments or suggestions or contributions for the *ToolShed* they are welcome.

Big Apology to Chuck Morgan

In the June *ToolShed*, likely due to a malfunctioning brain, I attributed two Feb. meeting displays to Chuck Martin (who doesn't exist) rather than correctly to Chuck Morgan. I've apologized to Chuck and want you to know that those exceptional displays were CHUCK MORGAN'S.

Hank Allen



A year has passed since I was elected president and once again I must thank you all for your confidence in me and the rest of the slate. I'm pleased to have Greg Welsh as my vice president and extend a welcome to new board members Don Wallace and Ed Modugno. In the past year we had a very successful auction which grossed $57,495 as well as a huge picnic (a feat or fete we hope to duplicate this month). In addition we published the *ToolShed Treasury* and Hank Allen and Stu Shippey took the *ToolShed* to new heights. I hope you all are enjoying the expanded stories and photographs. It is always a challenge trying to balance the production costs for the *ToolShed* against our desire to deliver a useful and enjoyable newsletter. As always your comments and contributions concerning the *ToolShed* are greatly appreciated. While I'm on the subject of contributions a friendly reminder: dues are due July 1. As a courtesy we usually send the September issue to you even if you are past due. If your mailing label says 1998 you are paid up. If you are still in doubt, or if you are like me, and you discard the envelope a week before you read the *ToolShed*, please check with Jack Whelan our new treasurer.

September is the month for our most popular meeting: the picnic. Last year's weather was just short of amazing and we had a huge dealer turnout. I don't know if we can top it, but we will certainly try. I would ask your cooperation on a few picnic items. First, we can always use more displays. They don't have to be rare or valuable, just interesting. Second, please abide by Ken Vliet's suggested arrival time in the flyer. We want to be allowed back every year. And last, but not least, if you are selling at the picnic you must be a member in good standing (translation dues paid up).

Before I close, one more contribution is needed. We have been quite fortunate to have a long list of great speakers for our regular meetings. Hats off to Don Kahn who has done a great job over the years, but it is getting tough to find speakers who can impress our knowledgeable and talented group. So, I am asking for your help to either recommend a speaker you have seen or to volunteer to do a talk yourself. If you are a little unsure or bashful, I would be happy to do the talk with you. I have been called a lot of things, but bashful isn't one of them. See you at the picnic.

Welcome to new members: Elias Amaro, Queens Village, NY; Dan & Elaine Bergey, Harleysville, PA; Andrew Bernhardt, Hamburg; Dale & Florence Butterworth, Cumberland, ME; Douglas Davenport, Etna, NY; Don Goehe, Clinton; Roger Hanna, Pownal, ME; John Hathaway, Bedford, NY; Carl Hoffman, Cedar Knolls; Rudi Klose, Hillsdale; Scott Lauritsen, Washington, DC; Scott Lynk, Vergennes, VT; Brian Murphy, Chester; Steven Parisio, Olivebridge, NY; Bob Peyton, Herndon, VA; Louis Stiglitz, Springfield; Steve Surette, Martinsville; Mark Thompson, Ozone Park, NY; Victor Werney, Williston Park, NY; and Leslie Williams, Kintnersville, PA.

Joe

Meet Your Dealers
Peter Habicht

The purpose of this column is NOT to evaluate dealers, but simply to present useful & interesting information about tool sources..

Peter Habicht and his wife, Annette, have been antique dealers for almost 30 years. The business, known as Falcon Antiques, started out in a small way with household accessories - mainly in brass, copper, and pewter - but soon expanded to include country furniture. Items were mostly of British origin. In the early 1980s Peter decided to take a break from industry for a few years and devote his time to designing and making furniture. Tools soon became a natural part of the antique shop inventory as tools were needed, found, and used. The tool department of the shop gained rapidly as tools were, it seemed, in popular demand which came from not only the users, but also collectors, interior decorators, and, sometimes, someone just looking for a present for dad. Tool shopping for the antique shop became a family affair (including both Nicholas and Penny-Jane) and overtook the line of general antiques. It was at this time that the name of the business was changed to Falcon-Wood.

Of course, as with any tool or antique dealer, a nice collection of tools was being gleaned for personal use and display. It was not long before there were not enough table tops available in the house for tools.

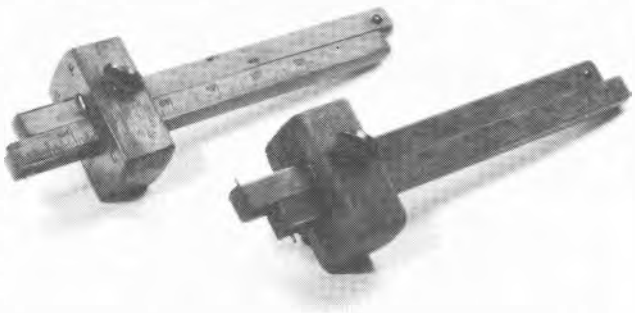
Peter was born and raised in Bedford, England. He was educated at the Bedford Modern School for Boys, served an apprenticeship with a steam turbine and diesel engine manufacturing company, and, later, attained a Masters Degree in welding metallurgy from Cranfield Institute of Technology. He emigrated with his new wife, Annette, to Columbus, Ohio, in 1966 and a couple of years later moved to New England. He has worked in the commercial nuclear industry most of this time and is currently consulting - when not dealing with old tools -for Northeast Utilities at their Millstone Point Station in Connecticut.

He is strongly pulled toward tools from Britain because of his origin, but certainly not exclusively. He maintains a good inventory of user Stanley tools, a variety of the more elegant American tools - including levels, plow planes, work benches, tool boxes, and books - along with those beautifully made British tools. He (mostly Annette) puts together a small, very successful brochure several times a year with what are considered some of the nicer or more unusual items found over the previous few months. A Home Page on the Internet has also proved to be a good source of new customers from various parts of the globe.

A member of most tool clubs and associations, Peter gets to many tool sales, shows, and auctions, often accompanied by one or more family members. You will find him there or at his home and shop in the Berkshires on Route 41 in Sheffield, Massachusetts. The shop is open most days from April through November. At other times a call is advised to get him off the ski slopes: **413-229-7745**. Visit Peter's Home Page on the Internet for a taste of tools, information on associations, and tool-related books: http://**www.old tools.com**.

Ed: Peter's article on British Tools appeared in the April and June 1995 issues of the *ToolShed*. You'll find him at the CRAFTS picnic.

THE STANLEY RULE & LEVEL COMPANY (continued from page 1)



Left: Stanley No. 74 double marking gauge, boxwood with full plated head, 1863-1935. Right: Stanley No. 71 double marking gauge, beech with brass plated head and bars, 1863-1941.

One bit brace had been made by Stanley before the turn of the century, and for only one year: 1870. It was the No. 2 bit brace with a spring catch based on Augustus Stanley's 1869 patent. Harry Bartholomew's bit brace manufacturing company was acquired by Stanley in 1903. Back in 1861, Bartholomew had patented the exceedingly simple, but apparently novel, idea of anchoring a bit brace's sweep handle by applying fixed collars, sliding the rotating handle onto straight stock, and then bending the stock to form the bow of the brace. And, Bartholomew had other patents that Stanley used. In 1905 Stanley introduced a new line of bit braces, offering 17 styles in that year. However, it was the purchase of the Bridgeport, Connecticut, John S. Fray Company in 1909 that gave Stanley the greater measure of highly skilled workmen and a complete line of drill and brace styles. The Fray Division of Stanley continued manufacturing in Bridgeport, publishing its own catalogs, and filling orders on site until 1924 when operations were moved to New Britain. Stanley developed a reputation for some of the finest braces ever manufactured, applying some 44 patents to the line. They introduced their first hand drills in 1911.

Stanley No. 2 brass plumb bob with reel, Justus Traut 1874 patent, 1874-1937.

Jacob Siegley of Wilkes Barre, Pennsylvania, was a successful manufacturer who began selling his patent combination planes in 1879 in New York. He later introduced a line of iron bench planes. One innovation in which he preceeded Stanley was the milling of corrugations into the soles of his iron planes as shown in his 1893 patent, a feature Stanley first offered in 1898. Siegley developed his patent iron combination plane over a 12 year period through 1891. His concept of providing hollow and round and various moulding and plow cutters was similar to the idea that Justus Traut patented in 1878. His competitive designs got Stanley's attention and they made the first of several agreements with him in 1901.

Stanley manufactured iron block and wood-bottom transitional planes under the Siegley name from 1901 through 1927. Apparently, customer preference for Siegley's brand prompted Stanley to obtain an agreement in 1903 giving extended rights to use Jacob Siegley's full name on products, labels, and catalogs. The same year Siegley contracted to work as a consultant for Stanley,

Left: Atha No. 251 prospecting pick. Right: Atha/Stanley No. 51½C claw hammer (orig. Stanley Rule & Level plant label).

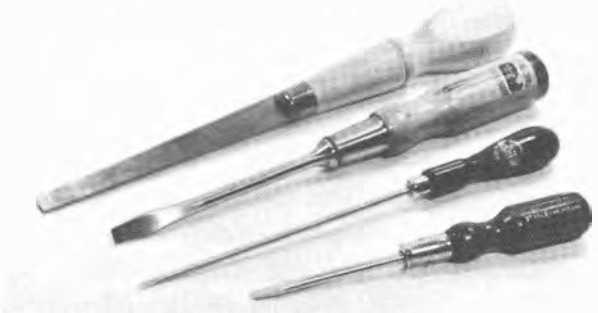
agreeing to assign any further plane patents to them. Stanley purchased Siegley's plane business in 1905 and sold much of his inventory. His combination planes were distributed through the Union Manufacturing Company of New Britain which sold this inventory until 1927.

Before 1911 Stanley had offered a few mallets and tack hammers, but no carpenter's or other hammers. They moved into hammers in a big way with the acquisition of Humason & Beckley of New Britain in 1912 and, more importantly, of The Atha Tool Company of Newark, New Jersey, which provided the most substantial contribution to Stanley's proposed line of steel percussion tools. Atha's history went almost as far back as Stanley's. It had accumulated important resources in timber and steel and offered a line of products including hammers, sledges, wedges, blacksmith's tools, chisels, punches, and a considerable number of related tools. Most importantly,

they had developed a fine reputation built largely by their skilled craftsmen. Stanley preserved the organization intact as an operating division in Newark.

Since the 1860s Stanley had felt unable to compete in the manufacture of carpenter's steel squares. They, of course, had produced bevels, mitre squares, and try squares since the 1850s. But not the large steel framing square, which had to be precisely cut and welded and hand inscribed with divisions and tables for the computation of area and length of triangle sides. For almost 100 years the Eagle Square Company of South Shaftsbury, Vermont, had practically the entire market's preference for this product. While Stanley savored the idea of including this important item in their carpenter's tool line, they saw no prospect of winning the trade. Eagle Square had also entered the housing market and had a prosperous side business supplying ready-cut lumber for building projects. By 1916 the company had passed through several hands, and their ownership in that year sold a majority interest to Stanley. With this control, Stanley acquired not only the right to put its trademark on the finest framing squares known, but also acquired the wood processing facility and its expertise. As Stanley's requirements for wood had increased so tremendously, this additional asset provided an important benefit for their growing operations. Stanley preserves the Eagle Square operation in South Shaftsbury, close to its supplies of hardwood.

Stanley's "Gage" Plane line was acquired with the purchase of the Gage Tool Company of Vineland. N.J. in 1919. Owner and inventor John Gage was an established manufacturer of wood-bottom transitional planes who had secured three patents by 1886. By the number of these planes observed today, Gage enjoyed a fair amount of success and was actually in competition with Stanley's line for several decades. Following the acquisition, Stanley introduced a series of eight transitional planes identical to Gage's design except they were marked Stanley on the little metal plate attached to the face of the cutters. The toe of the plane was marked "G" followed by the model number. Both Stanley and Gage transitional planes were phased out over time ending in 1942.



Stanley screwdrivers top to bottom: No. 86 flat blade, 1888-1927; No. 1001 "100 Plus," 1929-1953; No. 177, 1926-1964; Hurwood.

The Merger and Aftermath

By 1920 it was time for the Rule & Level Company to merge with the Stanley Works. Their histories had been so intimately associated that, in fact, most people thought they were the same company. Just a few years earlier, William Hart, who had served the Stanley Works for 61 years, and as president since 1884, had retired, and the "sweetheart" logo had been adopted in his honor. The logo had the initials "S.W." (Stanley Works) inscribed in a heart. After the merger the Sweetheart mark of the Stanley Works and the notched rectangle of Rule & Level were merged. This well-known logo first appeared on Stanley tools in 1920 and was continued on production runs until 1934.

So, 1920 marked the end of the Stanley Rule & Level Company, and that was to be our story. However, Stanley hand tool buffs may be interested in a few significant dates that followed:

1923 - The "Four Square" line of tools for the home craftsman was introduced.

1929 - The name "Defiance," last used in 1880, was revived for a line of lower-quality, lower-priced tools. (Stanley had earlier used this name on tools made for others.)

1929 - Stanley acquired the Chapin-Stephens Co. of Pine Meadow, Connecticut, the oldest rule and plane maker in the United States.

1930 - Stanley acquired the Farrand Company of Berlin, Connecticut, maker of the concavo/convex, flexible/rigid rule. From this came the "Powerlock" tape measure.

1944 - Stanley purchased the Russell Jennings Manufacturing Company of Chester, Connecticut, makers of auger bits since 1840.

1946 - Stanley acquired the North Brothers Manufacturing Company of Philadelphia, makers of the famous "Yankee" brand tools.

In conclusion, a unique celebration was held in New Britain in 1993. John Walter and his wife, Randa, arranged a convention in Hartford, which was attended by over 300 Stanley collectors, to honor Stanley's 150th anniversary. Stanley executives and employees responded warmly, attending the exhibition and entertaining the collectors at Stanley headquarters. No one could have been more appreciative of this reception than those attendees who have made Stanley tools such a large part of their lives.

Photos by Walter Jacob of tools in the Jacob Collection.

Ed: *The ToolShed*, again, thanks John Walter for his permission to excerpt this material from his newly revised book: *Antique & Collectible Stanley Tools: Guide to Identity & Value*. This magnificent book is reviewed by Walter Jacob in this issue. John can be reached at: The Tool Merchant, P.O. Box 227, Marietta, Ohio 45750. Write to this address for a list of books and other publications available.

Cutting Threads In Wood

by Jack Whelan

Making screw arms and nuts for some plow planes I made recently (see the book review in the April *ToolShed*) forced me to learn a bit about threading wood. Some of my earlier attempts had not been smashing successes, but I got out my old screw-box and tried again. I learned that getting the correct setting for the cutter was the key. If it does not cut deeply enough, the thread formed will be stripped as you force it through the internal threads of the screw-box. If you cut too deeply, the top of the thread chips out.

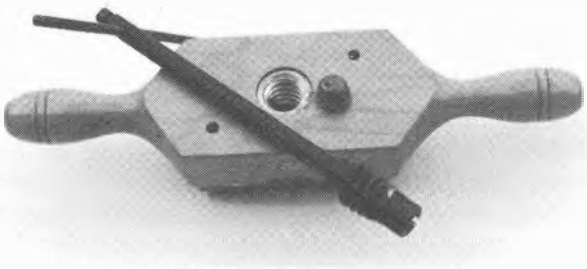


Photo 1.

Any large tool store will sell you a screw-box and matching tap (see Photo 1), in sizes for making threads from a half inch to an inch in diameter. The commercial wood taps produce satisfactory female threads in holes bored across the grain, but tapping end grain usually produces badly chipped threads. The screw-boxes work well if you keep the cutter sharp and carefully set.

To cut a male thread on, for example, a plow arm, clamp the workpiece in a vise with the cylindrical arm pointing up. Choose a screw-box of the proper size, and fit the unthreaded end of its opening over the cylinder (slightly chamfering the end of the cylinder helps). Turn the box clockwise, with slight downward pressure. As the cutter bites, it starts the male thread, which then engages a female thread inside the box. As you continue to turn the screw-box, its thread controls the progress of the box along the cylinder and forces it to create the mating male thread. Some recommend lubricating the work with linseed oil, but I have not found this to be necessary.

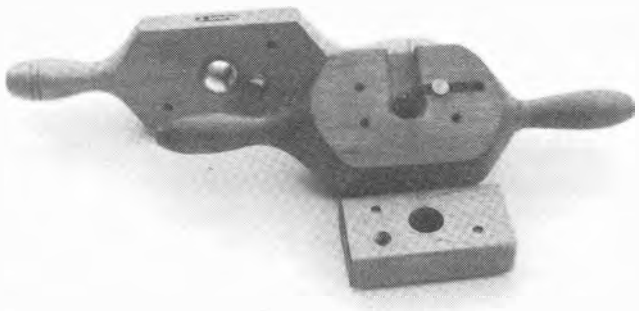


Photo 2.

The screw-box is made in two parts. The larger piece shown in Photo 2 (let's call it the body) is usually fitted with handles. It is pierced with a threaded hole, and holds a sharp cutter clamped in a channel. This cutter (hidden until the box is taken apart) is made of square tool steel stock sharpened to a V .

The cutter must be precisely positioned in the body. The bottom of the V cutting edge must align with the deepest part (the root) of the thread in the box. The cutting edge is sharpened at an angle which makes it start its cut at the crest of the thread before slicing downward to the root; this minimizes chipping. The line of the cutter must agree with the rake or angle of the thread, meaning that the channel for the cutter is deeper at the blunt end.

The smaller piece of the screw-box, the cap (shown in the foreground of Photo 2), has a hole through it of the same diameter as the cylinder to be threaded. It is held to the body by screws, with positioning pins ensuring that this hole is precisely aligned with the axis of the female thread in the body. The cap's function is to ensure that the cylinder to be threaded enters the body of the box properly aligned. Once the thread is well started, the cap is not essential.

Where it is necessary to thread up to a shoulder (as in threading a plow arm), the thread is continued until the cap of the tool hits the shoulder. Then the thread-box is backed off the workpiece, the cap is removed, the body is carefully threaded back onto the threaded stock, and threading continued. However, a difficulty with most commercial screw-boxes (and a good reason for making your own) is that the clamp which holds the cutter in position projects too far above the cutter. The clamp, now, rather than the cap, hits the shoulder and stops the threading cut. I've made several screw-boxes with clamps which project less, thus minimizing the problem. An alternative is completing the thread with a V-carving chisel.

Should you wish to make your own screw-box, be prepared to spend a significant amount of time fiddling with the placement of the cutter before you have a working tool. Use a commercial unit as a prototype, and a commercial tap to cut the female threads in the body. (If you cannot find a tap of the size you need, making one is not out of the question if you have access to a screw cutting metal lathe.) The cutter may be purchased or made from 1/4" square tool steel stock, shaped with a triangular file, hardened and tempered, and well sharpened.

The modern version of the screw-box, made by the Beall Tool Co. and others, may not look like one but acts in the same way. It simply replaces the stationary cutter

with a conical router bit.

The tap which cuts the female thread (either in making your screw-box or in making the nut and washer for your plow) is much like the familiar metal-cutting taps, and is used the same way. As mentioned above, they do not work well in threading end grain. Looking at old plows, you will find that many of their nuts were in fact threaded in end grain, raising the question as to how this was done. I suspect that production methods of the later nineteenth century used machine methods, essentially using thread chasers mounted in the carriage of a screw-cutting lathe. Another possibility is that they were able to make another sort of tap work (I haven't).

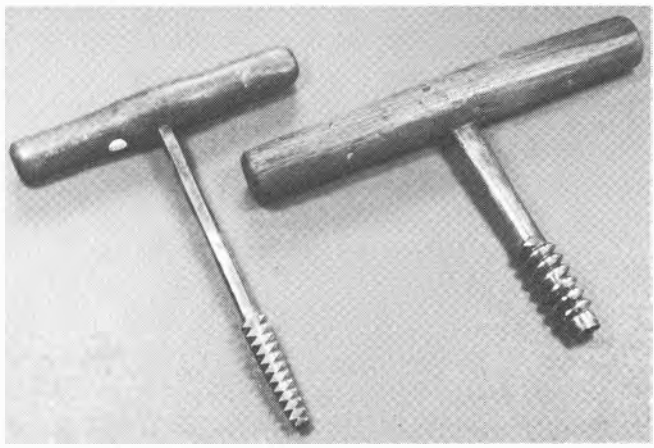


Photo 3.

The present commercial tap is shown in Photo 1; a hand-forged predecessor is seen on the left of Photo 3. A second sort of tap (on the right of Photo 3) is harder to find (I've only located one set, made in West Germany). A rod is threaded with the desired profile. The end is turned down to the root diameter of the thread (to ensure aligned starting) and converted to a tubular shape by drilling an endwise (axial) hole. This provides a vent for the shavings. Where the thread begins, a second hole is drilled at right angles to the first (radially), through the crest of the thread and into the axial hole. The thread that is terminated by this hole is honed to a sharp edge, which acts as the cutter.

In contrast to the common form of tap which shaves the threads in stages, this one cuts the full depth in one stroke. A variant uses two axial holes honed to cutting edges, with the thread section between the holes reduced in height. This cuts the threads in two steps rather than all at once.

The screw-box, like the right-hand tap of Photo 3, cuts the thread in one step. You will occasionally find an old, large-diameter screw-box fitted with two cutters. Their internal thread is reduced in height between the two cutters, as in the two-stage tap described above.

Making taps or screw-boxes is straightforward when you already have a thread to copy. But how were threads made in the first place? It is possible to carve them by hand, given enough time, patience, and ability. The procedure was described by Hero of Alexandria more than two thousand years ago. Since a thread is really an inclined plane or wedge wrapped around a cylinder, it may be laid out by wrapping a long wedge-shaped piece of paper around a dowel. (Winding a paper ribbon around the dowel is less accurate unless you have talented hands.) The helix formed by its edge is pricked through to the dowel, and a line scribed through the prickmarks locates the root of the thread. The thread is formed by deepening this line with V-tools. Recent examples of hand-carved threads have been reported (for instance in *Fine Woodworking* Vol.50, p.114 and 28, pp.84-85); the latter reference also describes carving the nuts with hand tools).

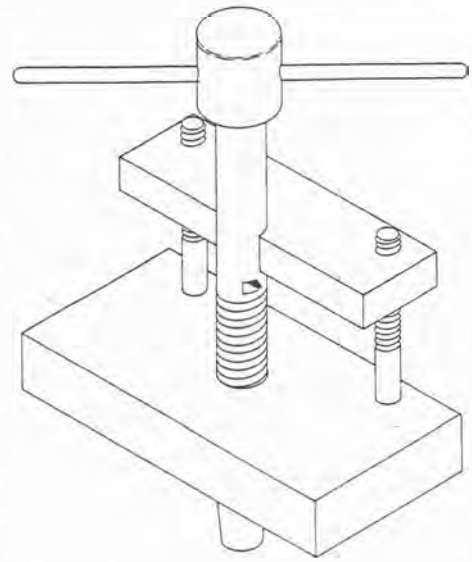


Figure 4.

A somewhat easier and more accurate method requires a device similar to the one shown in Figure 4, in which a female thread is made first. A helix of the desired pitch is scribed on a dowel of smaller diameter than that of the thread you need. The helix outline is simply grooved with a saw. A mortise radially through this dowel, at a point beyond the grooved section, carries a V-cutter. This proto-screw is passed through a hole in a frame member, which is fitted with a pair of thin metal guides. These metal guides are canted at the screw angle, and arranged to fit into the grooves of the proto-screw. They serve the function of a nut, causing the proto-screw's cutter to trace the path required to cut a female thread.

The workpiece is clamped rigidly in the frame, with the free end of the proto-screw passing through the hole you wish to thread. Turning the proto-screw moves its cutter through the workpiece, outlining the thread. The cutter is adjusted outward after each pass, until the desired thread depth is attained. You now have a nut which can be used to make a screw-box.

Cutting fine threads, such as those used for wooden screw-top jars, is not usually done by any of the above methods. It might be possible to make a screw-box and tap for this use, but one that would thread up to the shoulder would pose a considerable problem. Today these threading jobs would be done using a screw-cutting metal lathe (or you can buy threaded brass rings for gluing in place).

Some antique lathes had headstock spindles fitted with short sections of threads of various pitch, to cut this class of thread. Instead of moving the cutting tool by means of a lead screw (as in today's thread-cutting lathe), one of these threads could be engaged (by a pointed member in the headstock) to move the rotating workpiece lengthwise past a stationary V-cutting tool.

Photo 5.

An old hand method, still in use by a few accomplished turners, is to use screw chasers such as seen in Photo 5 (those for male threads are on the left, female on the right). The trick is to rotate the workpiece in a lathe and move the chaser along the stock (or inside the hole in the stock for a female thread) at just the right speed. The second cutting tooth of the chaser then enters the groove cut by the first. Once this is done, the chaser is self-guiding for as long as you wish. A steady hand is needed. If the motion of the chaser along the stock is not regular during the initial cut, the thread moves forward erratically. The chaser tool will continue to track and make threads, but the resultant "drunken" thread will not mesh with its mate. If you would like to try your hand at this technique, a fine description is provided by Richard Starr in *Fine Woodworking* Vol.60 pp.53-57 (1986).

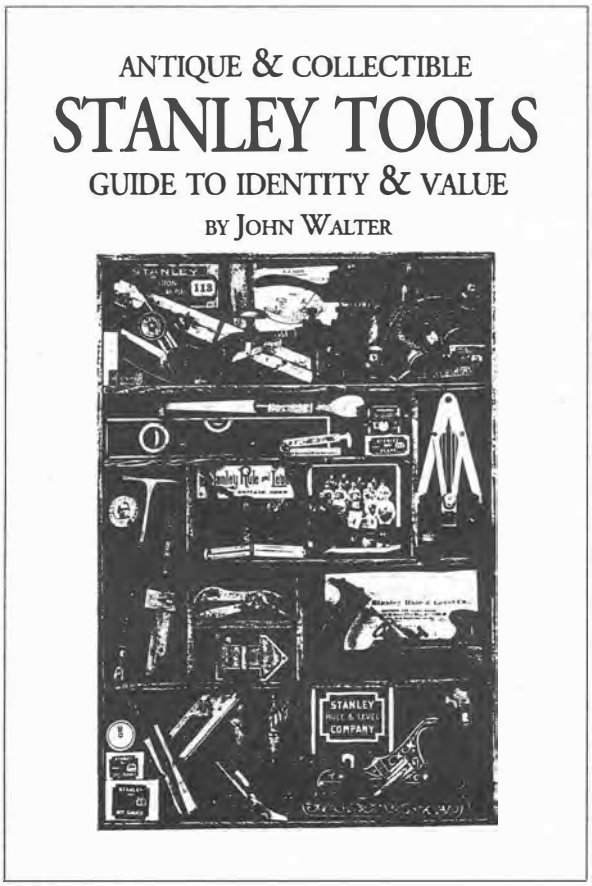
BOOK REVIEW by Walter Jacob

Antique & Collectible Stanley Tools: Guide to Identity & Value, 2nd Edition.
By John Walter. Published 1996 by The Tool Merchant, Marietta, Ohio. 885 pages, $40 hardcover & $30 softcover.

John Walter was born in Akron, Ohio. After serving several years in the U.S. Army as a medic, he returned to civilian life and worked as a park patrol ranger for the city of Akron.

John became interested in antique tools in 1982 when his grandfather gave him some tools. Because his mother shopped at flea markets, he soon began dealing with tools at these markets and realized that Stanley tools had durability and sold well. He admired the creativity of Stanley employees and how they were quick to adapt to new designs. He admired their pioneering efforts in tool design, and Stanley gained his respect as a corporation.

In the early 1980s John formed his own business: The Tool Merchant. Seeing a need for a pocket price guide to Stanley tools, he published *Antique and Collectible Stanley Planes* in 1985. This was so popular that he revised it in 1986 and, again, in 1987. In 1989 he published another pocket price guide entitled *Boxwood and Ivory Stanley Rules*. This, too, was a success. Seeing there was a need for a **comprehensive** guide to Stanley tools,



John went on to publish the first edition of *Antique and Collectible Stanley Tools* in 1990. At the same time, he began publishing the *Stanley Tool Collector News*, a magazine with three issues each year. The magazine featured the latest discoveries and research information on Stanley tools. Many noted Stanley collectors contributed articles.

The second edition of *Antique and Collectible Stanley Tools* is John's latest effort. It is the most complete reference guide to Stanley tools published to date. In his introduction he describes how to use his guide with comments on how the condition of tools affects price. He mentions counterfeits and "face lifts" by individuals trying to capitalize on the inability of novice collectors and users to recognize fakes. He dares to discuss **fakes**! His work, in this section alone, does a great service to all beginners and Stanley tool collectors.

There is a section on "Basic Tool Categories" which goes into historic background and what makes certain items more collectible and why. (It's not always because only a limited number are available on the market.) The collector and user will find that John has included a section with a 30 page overview of Stanley's history. This will be of interest to those readers wishing to understand how Stanley got to where it is today - an international tool corporation. [Ed. The article on The Stanley Rule & Level Company which concludes in this issue was drawn largely from this section.]

"Tool Listings" occupies the next 583 pages and lists descriptive information about collectible paper and tools chronologically by manufacturer's number, and in categories, such as advertising, braces, catalogs, levels, planes, rules, etc. Each listing notes the manufacturing dates of a tool or the year of publication of a paper, its dimensions, construction (cast iron, wood, etc.), applied patents, user information, the average value (selling price), notes on various types known, and rarity. The wealth of information in this section is worth the price of the book. To compile all this information was a major achievement and John is to be commended for his efforts. The importance of these listings cannot be underestimated. The reader, whether a major collector or a first-time Stanley tool owner, can find the answers to most questions at a glance. No other tool book makes it this easy. The user information answers many a woodworker's questions on achieving the maximum use of tools by solving working problems.

Not only does John do a superb job of listing the categories of Stanley tools, he includes eight type studies of Stanley planes, done by other authors, that pinpoint the exact dates of manufacture, within a few years, of major types of woodworking planes. The "Type Studies" section includes:

1. Roger Smith's study of Stanley/Bailey bench planes gives, chronologically, the finite features of the development of these tools.

2. John Wells', Jack Schoellhamer's, and Bob Kaune's studies of Bailey Excelsior block planes and knuckle-joint block planes gives a history of their early development.

3. The Bailey wood bottom transitional type study by Roger Smith guides the accurate dating of these planes.

4. The Miller's Patent Combination plane type study, by the author of this review, is included so that anyone can learn more about these wonderful tools.

5. Roger Smith's type studies of Stanley's No. 45, No. 46, and No. 50 combination planes will help with dating and with knowing whether a plane is complete or missing parts.

6. The type study of the No. 71 series router planes by Lars Larsen, Jim Price, and Roger Smith enables accurate dating of these planes.

7. John Wells' study of the early model Stanley 110 helps shed new light into the history of one of Stanley's longest made planes.

8. Bob Kaune's discussion of the history, characteristics, and types of the Stanley Bed Rock bench plane. These are Stanley's best planes and are highly sought after by woodworkers.

Other type studies are: levels by Don Rosebrook, John's trademark comparison for boxwood and ivory rules, and John's comparison of box labels.

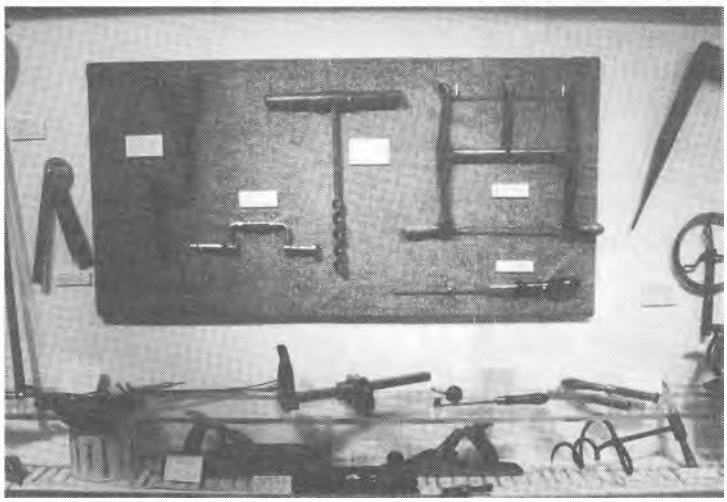
Throughout the "Tool Listings" many patent dates are included. Toward the end of the book 54 pages of patent information, grouped by tool type, is supplied for those who wish to expand their knowledge in this area. The section is a wonderful reference for the historian, researcher, and the inquisitive. A glossery of terms ends the book. Often terminology is confusing to people newly introduced to tool collecting; this glossery will enable all collectors and users to "speak the Stanley language."

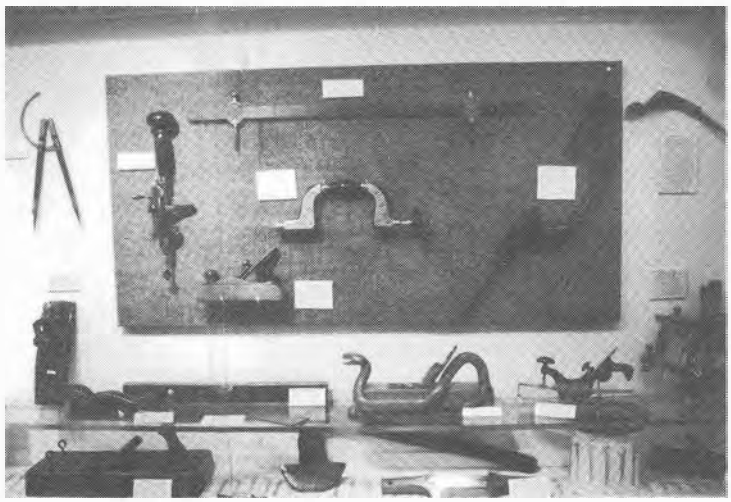
John Walter's new *Antique & Collectible Stanley Tools: Guide to Identity & Value* is a great source of information. Seldom does a book cover such a broad range of information. It is a well-done book with some minor corrections that, I am sure, will be made in the second printing. Yes, the second printing is at the presses, and 7000 copies have been sold. This, in itself, attests to the magnitude of this publication. If you are a woodworker wanting to find more information about how to use a tool, or if you are a collector wishing to date and type a Stanley tool, or if you just have an interest in Stanley as a company, this book is for you. It is a great tribute to one of the few remaining American tool companies.

Ed. The book is available from John Walter, PO Box 227, Marietta, OH 45750, or from your favorite tool dealer.

DISPLAYING TOOLS — Herb Kean at the Morris County Library

Phil Lothrop told us about displaying tools at his local library in the April *ToolShed*, but there were no photos of his display. Well, Herb Kean mounted a tool display at his county library in March and April, and Charlie Flynn was there with his camera. Herb had a huge wall display case to work with, and a library employee enhanced the displays with some nice computer graphics. For example, a page from a wrench book was reproduced over and over on a long paper ribbon about 8" wide which was then ruffled up to surround the exhibit. The display was in a hallway which made it difficult to photograph, but we have three photos - left, center, and right - which give a reasonable perspective on the display. You can see that each tool had a label describing it. There's an insert to this issue showing you some of Herb's labels. Did you know what an Eprovette is? With Phil's advice, Herb's photos, and sample labels, you're all set to mount a display of your own. Don't forget to ask your library staff for assistance.





CRAFTS APRIL MEETING DISPLAYS

There were two displays at the April meeting: one display entitled "Le Style Francaise" (left photo) showcased French tools from Chuck Granick's collection; and the other display of "Sargent VBM" tools (right photo) is from the collection of Jim Bigham.

Kean Kuttin's

Never Go Back ?

I once read an article in *The Saturday Evening Post* entitled "Never Go Back". It described the pitfalls of returning to the nostalgic places of your youth. The gist of it was: **the things that you cared the most about will likely be the very things that have changed the most**.

Like many people I never thought this would happen to me, but even if the chance existed I was willing to risk it. It turned out that the guy who wrote the article had a pretty good grip on life. Almost every one of his predictions came true. Even so, it was worth it (or so I rationalized).

It happened about a year ago when my son and I went to the Arapahoe Basin in the heart of the Colorado Rockies to do some "spring skiing". I hadn't been on skis since my service days (50 years back). But it was supposed to be like riding a bicycle: **you never forget**. I will admit that you **don't forget**, you just bruise easier, stiffen up easier, and fall a lot easier. On top of which you are gasping for breath at 12,000 feet. At the end of the second day I was ready for a rehabilitation center. I convinced my son that now was the time to give up this "wonderful" skiing and take in the sights. I had an easier time convincing him than I thought. I suppose my constant stories (to anyone who would listen) about the good old days with 7' 3" hickories, Northland bindings, and "90 pounds of rucksack" may have embarrassed him a little. Or maybe the altitude got to him also.

At any rate, we started off the following morning to see all the great places where I had spent my weekends when training to be a Ski Trooper. It was one dismal disappointment after another. Only two possibilities existed: the place either was in shambles or it was so built-up that you couldn't recognize it. But I was not going to give up! I would try the one place that I almost knew would still be there: the famous Pioneer Club in Leadville, Colorado. Here is where the bullet holes were still in the walls along the bar. Here is where the poem about "the face on the barroom floor" originated. The "dead man's hand" sung about in the poem (a poker hand of aces and eights) was still tacked to the mirror when I left 50 years ago.

As we approached the town of Leadville, with the highest Post Office in the U.S., I could see that all would be well. The sidewalks were still six feet up from the road to allow for the snow that never got plowed. Oh, there are stories about falling off those board sidewalks into some wonderfully cushiony snowbank, and just lying there until sobering sensibilities returned (remember, I was only 19). Before we checked into the hotel, we had to quickly visit the Pioneer Club.

It was still there ok, but much smaller than I remembered it. And the gambling portion somehow got detached from the bar. In the 1940s gambling was legal, or quasi-legal, in Colorado. Every mining town had card tables and a roulette wheel. Leadville was the roughest, toughest mining town in all Colorado, maybe even all North America (at least in my mind, anyhow).

The gambling hall was boarded up and the bordello on the upper floor had all its windows broken out. It was a mess. My son voted for giving it up right then and there, but I wanted to ask around at the bar. We went in and immediately stood out as Government undercover agents. When I asked what happened to the club I was told to talk to the owner at the end of the bar. My son and I moved down and listened to a chronological tale of woe spanning the 50 years since the "good ole days". And it culminated with his wanting to sell us the place - all of it: brothel, gaming hall, and bar.

Up to now my son was bored to tears, but now an opportunity to buy, buy, buy was under his nose. We heard from the owner that there were lobbyists in Denver who were a whisker away from having Leadville legalized for tourist gambling. Three such towns in Colorado were already legalized and being restored to the days of the Roaring West. What gambling hall would hold more attraction than the very one that was renowned throughout the West. And, the price was right. Too right!! I smelled a rat. And no wonder. When he showed us the **gutted** gambling hall, it was full of rats and more bullet holes from shooting at them.

We left rather quickly after that and went to town. We were surprised to have everyone greet us as if we were known to them. We were known to them all right. We were the city slickers who were about to be **taken** by the old guy who owned the Pioneer. He had phoned every antique shop in town, as we told him we would be checking them out. But he must not have had many friends, because they all told us the same story: Leadville had been **turned down** by the politicians in Denver.

We lost out on the Pioneer Club (it was a fantasy to think we could have run it without moving there), but we gained in our ability to swing all kinds of other deals. For some reason, everyone thought we were loaded and brought what few old tools that existed in the area to our hotel. Nothing was great, but we managed to get a 10" red brass plumb bob with a rare western signature.

The rest of the trip was just more of the same. Old abandoned buildings or brand new hotels - nothing as it was. The most unkind cut of all was when I proudly took my son to Camp Carson in Colorado Springs (now Fort Carson), the original home of the 10th Mountain Division and the elite 38th Mountain Regiment. They never even heard of the 38th! At Headquarters we were told that if I would make a plaque showing when the 10th and 38th were there, they would hang it in the lobby. (I have since done that.) I also was invited to help form the museum which would house the tools and weapons of a Ski Trooper. Weapons they had plenty of, but the tools had either been thrown out or lost. **There** I was able to help. Take-apart camp ax, pocket crosscut saw blade, compass, distance estimator, mohair climbers, ice crampons, pitons and piton hammer, snaplinks, climbing ropes, ice ax, and other tools and implements along with parkas, muckaluks, mummycases, and even skis and snowshoes were later donated by members of the 10th and 38th. Don't ask where they got them.

We toured the well-manicured grounds and the brick hotel-like barracks. It looked more like a Las Vegas resort complex than an Army garrison camp. We were shown the **antique barracks** of the 1940s. There were two of them at the far end of the motor pool used for long-term **junk** storage. It was a sorry sight.

I left Colorado with mixed emotions: happy to see the scenery, which never changed, but sad about the gone-forever places that I had such fond memories of. Maybe *The Saturday Evening Post* writer was right when he said, **"Never go back"**. But I'd still go.

Herb Kean

Fall Auction Schedule

Sept. 7, *Fine Tool Journal*, absentee auction, call Clarence Blanchard for information 207-688-4962.

Sept. 13, Gablesville AC, Boyertown, PA, Barry Hurchalla's regular monthly auction. (Barry's York, Pa. auction will be on Jan. 24, 1998.) Call Barry 610-323-0333 to get on his mailing list.

Sept. 19-20, Holiday Inn, Nashua, NH, Your Country Auctioneer's Annual Fall Tool Show and Auctions (Listed on 19th & Catalog on 20th.). Call Lee Murray for info 603-456-3705.

Sept. 27, England. David Stanley's 30th International Catalog Auction. Call Mechanick's Workbench for a catalog 508-748-1680.

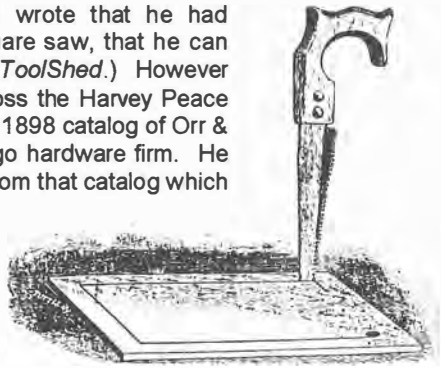
Oct. 3-4, Indianapolis, Indiana. Tom Witte's Fall Tool Show & Auction. Call Tom 616-668-4161.

Oct. 24-25, Sheraton Inn-East, Harrisburg, Penn., Brown's 14th Annual Dealer Show and International Tool Auction. Call Clarence Blanchard 207-688-4962 for a catalog or information.

Notice Cory Amsler, Curator at the Mercer Museum in Doylestown, PA, reports that the Museum's annual Tool Discovery Day will be held on Nov. 1, 10 am - 3 pm. For lunch your editor recommends Maxwell's Restaurant and Victorian Pub.

✉ Letters: *The Square Saw* and *Whatsits #30 & 31.*

Roger Smith wrote that he had never seen a square saw, that he can recall. (See April *ToolShed*.) However he did come across the Harvey Peace square saw in the 1898 catalog of Orr & Lockett, a Chicago hardware firm. He also sent the clip from that catalog which we include here.



SQUARE HOLE SAW.

This valuable tool is now offered to the trade. It is made in three sizes—10, 12, and 18 inch; is a combined compass and square hole saw, and will doubtless entirely take the place of the former.

One trial will be sufficient to demonstrate its great economy in dove-tail and square hole work of every description, and carpenters and wheelwrights not having a set of all sizes of these saws will be blind to their own interests and will labor under serious disadvantages as against those who supply themselves therewith.

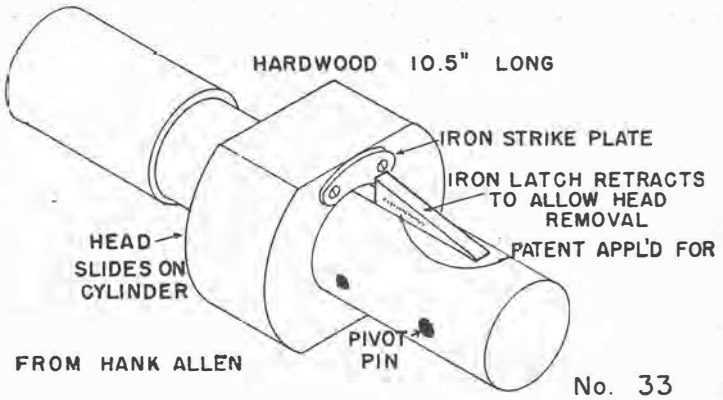
Made, as they necessarily must be, from the very best grade of cast steel and with the greatest possible care, they will, for compass use alone, outlast and outwear a dozen ordinary saws; while at the same time, furnishing to the mechanic a saving in labor of at least 75 per cent. on square hole work of all descriptions.

Size, inches	10	12	18
Per dozen	$10 00	12 00	15 00

James Gauntlett of Boise, Idaho, wrote that Whatsit #30 in the February *ToolShed* is a craftsman-made butt gauge used to install door hinges. He refers us to *Salaman* figure #298 for a modern version. He's provided much more information on doors and hinges which we hope to include in a future issue.

Sam Spector of Edison, N.J. wrote that Whatsit #31 in the April *ToolShed* looks like a moulder's square trowel. He spotted a very similar picture of this type of trowel in an old tool catalog.

WILLY TELLUS WHATSIT



Buy, Swap, & Sell

CRAFTS members only may have a free 5 line (40 word) ad that is primarily related to the exchange of tools or information. Each line over 5 is $1. Send to: Stuart Shippey, 251 Hillside Ave., Chatham NJ 07928-1732, FAX 973 301-9781, or E-mail sshippey@asco.com. Ads accepted on a space permitting basis.

Wanted

MILLERS FALLS CATALOGS BEFORE 1900. Originals, copies, etc. Charles Thrower, 4085 Pheasant Ct., Allentown, PA 18103-9769 or call 610 432-8715.

STAIR RAIL PLANES and SHAVES by PHILADELPHIA makers. Please contact: Leon Kashishian, 321 W. Vine St., Hatfield, PA 19440 or call 215 855-8655.

STANLEY "HANDYMAN" Tools, Catalogs, Advertising, etc. that deals with this line of tools. Bill Hermanek, 31 Wildwood La., Smithtown, NY 11787. 516 360-1216.

UNUSUAL TOOLS, WHATSITS, old DENTAL INSTRUMENTS, solar compass, rack wing calipers/dividers. Bill McDougall, 4020 Grande Dr., NW, Albuquerque, NM 87107 or call 505 344-9272.

For Sale

The TOOLEMERA PRESS. Limited edition reproductions of trade catalogs & tool related ephemera. List of current titles available by E-mail or surface mail. Gary Roberts. 1077 South St., Roslindale, MA 02131-2321. groberts@shore.net

DRAFTING TEMPLATES - hard to find items at bargain prices. Great for the amateur, hobbyist or occasional user who can't afford CAD. Send $2.00 and S.A.S.E. for list and prices to: Phil Lothrop, 203 Rolling Green Av, New Castle, DE 19720-4719.

Lew Cooper is removing to retirement home! Selling tool & woodworking library, cabinet shop, lumber cheap. 2 cast iron stoves, treadle morticing machine & more. Some items free to good home incl. vermiculite, dry firewood & kindling. Call 908 879-5015 with questions.

Find old tools from your home computer! Internet tool site maintains constant catalog of available old tools, satisfaction guaranteed! http://www.tooltimer.com/ or call 425 868-1532.

Here are some of the tool labels that Herb Kean used for his display (see page 10) at the Morris County Library in March and April.

ROPE CALIPER RULE 57

Specialty tools were constantly being produced, but never more so than with rules. It seemed that there was a rule designed for almost every craft that existed. This rule used to measure and calculate rope and cable has scales, a caliper arm, and measurements. Ca 1870

CROOKED KNIFE 58

Crooked knives (pronounced crook'-ed as opposed to some Indian knives in this area pronounced crookd) were originated in Maine and Canada. Although it is said that they are of Indian origin, there is some doubt about those made later--in the early 20th century. The blades were generally made from old files and razors, perhaps traded to the Indians. The wrap was either string or wire (also which could have been traded) but rarely thong or gut, which would be more likely. They are prized items when there is a story behind them. Many of the stories are as questionable as the knives. This knife was indeed found in Maine and the original copper wrap was replaced with brass. The blade still shows some of the file marks. The pattern of the chip carving is more maritime than Indian. The knife which is pulled into your body, was mostly carved for the decorative look. Circa 1850

ULTIMATUM BRACE 47

Very few tools carry Queen Victoria's "Royal Patent Letters". This brace by William Marples of Sheffield England does. It is framed in brass, with ebony infills and engraved with the royal lion and unicorn of the crown. Although we in the U.S. eventually matched and surpassed the finest tools that were made in England, we never quite matched the "Ultimatum". Circa 1870

BILL POSTER HAMMER 22

When the man posting the circulars on trees wanted to put it up high enough to keep the urchins from pulling it down, he put the "bill" in the clips of the hammer and started the already positioned nail on the side of the hammer. Once started, the hammer was used in its normal fashion. Pat.1886

SPILL PLANE 36

In the 18th century, people lit their pipes and candies by getting a tightly curled wood chip to carry the flame from the fireplace to the pipe etc. The spill plane did nothing else but cut these spills. There are even special "vases" that the spills were kept in, as they were important to everyday life.

COMPLEX MOLDING PLANE 37

Moldings in the 18th and 19th century were the mark of a prestigious home. The more decorative and complex the molding, the more pleasing and prestigious it was to the owner. It was not easy to make these complicated planes and only the best planemakers would attempt it. This plane was made by one of the few New Jersey planemakers, Mockridge & Francis, Newark. Circa 1850

EPROVTTTE 19

This unique tool was a gunpowder tester during the Revolutionary War. A pinch of powder was put into the tube end, and lit through the touch hole with a candle. The cap would explode upward via the toothed wheel. Where it came to rest would indicate (by number) the power of the gunpowder. Itinerant powder salesman of dubious integrity would lace the powder with dirt to *make* it appear larger in quantity. The eprovette (originating in France) put these crooks into the stockade.

(continued on other side)

BOW DRILL & BOW 49

Although there is evidence that primitive man used a bow with a stone tipped drill, it wasn't until the Copper Age of tools (4000-1000 BC) that the bow drill became effective. In the late 1800s the finest drill spindles were made from ebony in Sheffield England. During that period a Brooklyn toolmaker decided to challenge the superiority of the English bowdrill makers. He made one from Ivory! The contest was over.

TRAVELLER 17

Used by wheelwrights to "travel" around the outside of the wooden wagon wheel to get the proper measurement to fit the iron tire. The tire was heated to expand it and when assembled, cooled quickly with water to make a very tight fit. Most travellers were forged or cast from iron. This one (Circa 1890) is bronze.

WASHER CUTTER & SHARPENER 44

This strange looking tool called a Christmas Tree,, was used to cut cork or leather washers. Each tube cuts a different diameter. It takes two tubes to cut the inside and the outside of the washer. The pivoting blade on the sharpener scrapes the brass at the end of each tube to sharpen it. Circa 1880.

SPOKESHAVE 26

Where spokes, gunbutts, etc. needed profiling, the spoke shave was the tool of the craftsman. Amazing control can be exercised with this tool, while taking away large chips. Although going back almost to the Romans, the spoke shave was predominant in the 17th, 18th and 19th c. and is still used today.

GOOSEWING AX 15

Used as far back as the Medieval Period as a fighting ax, this ax (shaped like a goose's wing) was later used exclusively for hewing, (squaring a round log). Circa 1760.

SPIRAL AUGER 40

Introduced in the 1700s this was a way to drill a hole that has lasted to this day. Originally the spiral was twisted by hand by a blacksmith, but in the 19th century they developed machines to get the spiral perfectly spaced. The largest ones known are upwards of 5" in diameter and took two men to turn them.

STANLEY #122
WOOD BOTTOM PLANE 52

Although wood-bottomed planes came out almost the same time that the fully cast iron planes arrived, they did not survive. Stanley put out a Centennial model in 1876 that carried the Liberty Bell and the numbers 76 on the cap. Sales slacked off and even though they are still in existence today they are really only used by purists.

WASHBOARD PLANE 34

Old washboards were cut from a wide board with this plane. One of the ridges of the sole of the plane rides a previously cut ridge and the new ridges follow in perfect spacing. Circa 1820.

PATENTED BRACE 30

Over 500 braces were patented in the later part of the 1800s. This one in 1883 was one of the few tools that had a handle made from gutta percha, the forerunner of plastic. The wrist grip is gutta percha but the head is rosewood. The brace or bit stock took a variety of bits in the chuck. The later ones (including this one) had ratchets that allowed the user to turn only in one direction at a time.

TRAMMEL POINTS & BEAM 41

In order to draw a large circle, the carpenter used these adjustable points to set the diameter and scratch in the outline. Some of the points were turned wood, others were fancy cast brass. Circa 1880